

26°, 77°; Memphis, 38°, 80°. Kentucky, Louisville, 26°, 75°; Bowling Green, 32°, 78°. Ohio, Lewisburg, 16°, 70°; Hillsboro, 23°, 84°. Indiana, Richmond, 22°, 72°; Ft. Wayne, 42°, 79°. Michigan, Alpena, 4°, 56°; Grand Rapids, 9°, 72°. Wisconsin, Neillsville, 10°, 57°; Rocky Run, 27°, 76°. Illinois, Riley, 18°, 69°; Anna, 36°, 82°. Missouri, Oregon, 22°, 83°; Springfield, 34°, 81°. Iowa, Boonsboro, 18°, 79°; Vail, 18°, 80°. Minnesota, Duluth, 17°, 62; Breckenridge, 19°, 72°. Dakota, Fort Pembina, 13°, 70°; Yankton, 21°, 77°. Nebraska, Fort McPherson, 12°, 83°; Genoa, 22°, 84°. Kansas, Fort Leavenworth, 22°, 78°; Independence, 26°, 87°. New Mexico, Fort Union, 8°, 68°; Fort Wingate, 10°, 68°. Colorado, Pike's Peak, —23°, 33°; Fort Garland, 6°, 66°; Fort Lyon, 11°, 80°. Wyoming Territory, Fort Sanders, 11°, 66°; Fort Fetterman, 14°, 75°. Utah, Coalville, 12°, 72°; Salt Lake City, 27°, 73°. Idaho, Boise City, 26°, 75°. Nevada, Winnemucca, 14°, 69°; Camp McDermitt, 15°, 73°. California, Fresno, 32°, 80°; San Francisco, 46°, 66°; Red Bluff, 34°, 76°. Montana, Oregon and Washington Ty., not yet received.

Ranges of Temperature.—The monthly ranges will appear from an examination of the minimum and maximum temperatures just given. The smallest ranges occurred along the California and Gulf coasts; the largest ranges are reported from New England, Lake region, Missouri and Red River of the North valleys and Wyoming Territory. *Greatest Daily Ranges.*—In New England, they vary from 22°, least, at Eastport to 42°, greatest, on Mt. Washington; Middle States, from 24° at Cape May to 38° at Norfolk and Lynchburg; South Atlantic States, from 16° at Cape Lookout to 37° at Augusta; East Gulf States, from 11° at Key West to 35° at Montgomery; West Gulf States, from 18° at Galveston to 35° at Corsicana; Tennessee, from 29° at Memphis to 39° at Knoxville; Ohio valley, from 26° at Cairo to 36° at Pittsburg; Lower Lake region, from 26° at Detroit to 40° at Erie; Upper Lake region, from 24° at Port Huron to 37° at Milwaukee; Upper Mississippi valley, from 26° at La Crosse to 30° at all the other stations; Lower Missouri valley, from 30° at Omaha to 41° at Yankton; Red River of the North valley, 40°; western Texas, from 33° at Laredo to 45° at Stockton and 48° at Henrietta; Indian Territory to western Nebraska, from 35° at Fort Gibson to 42° at North Platte; Rocky Mountain stations, from 23° on Pike's Peak to 44° at Denver; Utah and Nevada, from 28° at Salt Lake City and Pioche to 36° at Winnemucca; Idaho, 29° at Boise City; California, from 15° at San Francisco to 36° at Yuma.

Frost out of Ground.—Massachusetts from 10th to 14th; New Hampshire, 31st. The ground was reported as frozen in Maryland on the 25th; Michigan, 20th, 24th, 25th, 29th; New York, 25th; Virginia, 5th; Kansas, 4th.

Ice is reported to have formed as follows: Ohio, 5th, 25th, 29th; Tennessee, 25th and 26th; Indiana, 25th; Kentucky, 25th; Illinois, 19th, 20th, 25th, 29th; New Jersey, 5th, 25th, 26th; Iowa, 25th; Kansas, 4th, 10th, 13th, 31st; Maryland, 17th, 21st; Nebraska, 11th, 12th, 16th, 28th, 29th, 31st; New Hampshire, 31st; New York, 16th, 21st, 22nd, 25th, 26th; North Carolina, 26th; Ohio, 25th; Pennsylvania, 5th, 16th, 21st to 26th and 30th; Vermont, 15th, 16th; Virginia, 5th, 20th, 21st.

PRECIPITATION.

On chart No. III is illustrated as accurately as possible the general distribution of the rainfall, which includes the melted snow, for the month. In the left hand corner of the same chart will be found a table giving the average precipitation for March by districts. The excess has been greatest in Minnesota and the Upper Lake region. There has been quite a large deficiency from the South Atlantic and Gulf States to the Ohio valley, but the greatest deficiencies occurred in Tennessee, the South Atlantic States and at Portland, Or.

Special Heavy Rains.—1st, Fort Larned, Kan., 1.20 inches. 8th, Breckenridge, Minn., 2.22 inches. 6th, Lebanon, Mo., (9th and 10th,) 2.28 in.; New Orleans, La., 2.73 in. in about 7 hours; Vicksburg, Miss., 4.46 in.; Clarksville, Tex., 2.00 in. in 5 hours; Springfield, Mo., (8th and 9th,) 3.25 in.; Shreveport, La., 4.14 in.; Mt. Ida, Ark., (8th and 9th,) 2.30 in.; Fayette, Miss., 3.60 in.; Okalooska, La., 12.65 in., (?) in 16 hours; Brookhaven, Miss., 3.00 in.; Baton Rouge Barracks, La., 3.50 inches. 10th, New Orleans, La., 2.04 in.; Boonsboro, Iowa, (8th to 10th,) 2.80 in.; Fort Barrancas, Fla., 3.25 in. in 5½ hours. 11th, Dover, Del., (11th and 12th,) 2.00 in.; Mendon, Mass., 2.00 in.; Fort Barrancas, Fla., 3.18 inches. 12th, Woodstock, Md., (11th, 12th and 13th,) 3.60 in.; Fall River, Mass., (11th to 13th,) 2.35 in.; Lynchburg, Va., 2.14 in.; Fort Whipple, Va., 2.28 in.; Washington, D. C., 2.60 in.; Green Castle, Pa., 2.37 in.; Moriches, N. Y., (11th and 12th,) 1.93 in.; College Hill, Ohio, 2.25 in.; Capeville, Va., 2.80 in., (2 inches in 1 hour); Bethel, Ohio, 2.00 in.; Mt. Auburn, Ohio, 2.32 in.; Fall River, Mass., (11th and 12th,) 2.26 in.; New Market, Md., (11th and 12th,) 2.48 in.; Ruggles, Ohio, 2.60 in.; Deadwood, D. T., 1.70 in.; Fort Pembina, Dak., 1.85 in.; Fort Hamilton, N. Y., 2.48 in.; Daytona, Fla., 2.42 inches. 13th, Accotink, Va., (12th and 13th,) 2.90 in.; Vineland, N. J., (11th to 13th,) 2.10 in.; Somerset, Mass., (11th to 13th,) 2.44 inches. 18th, Waltham, Mass., (17th and 18th,) 3.55 inches. 19th, Uvalde, Tex., 2.21 inches. 26th, Independence, Kan., (26th to 28th,) 3.12 inches. 27th, Fort Barrancas, Fla., 2.80 inches. 28th, St. Marks, Fla., 4.95 inches.

Largest monthly rain-falls.—At Okalooska, La., 13.77 inches; Ft. Barrancas, Fla., 10.75 in.; Mt. Washington, N. H., 10.66 in.; Halifax, N. S., 10.28 in.; Sydney, C. B., 9.57 in.; St. Marks, Fla., 8.65 in.; Olympia, W. T., 7.90 in.; Roseburg, Or., 6.36 in.; Portland, Or., 6.23 in.; Waltham, Mass., 6.85 in.; Judsonia, Ark., 6.75 in.

Smallest monthly rain-falls.—Ft. Griffin, Ft. Richardson, and Pilot Point, Tex., too small to measure; Coleman City, Tex., 0.03 in.; Graham, Tex., 0.12 in.; Yuma, A. T., 0.13 in.; Jacksboro, Tex., 0.15 in.; Ft. McKavitt, Tex., 0.19 in.; Decatur, Tex., 0.23 in.; Ft. Garland, Col., 0.24 in.; Burkes, A. T., 0.28 in.

Floods.—9th, crevasses reported 18 and 35 miles below New Orleans; heavy freshets also occurred in:

the vicinity of Okalooska, La. 12th, Mansfield, O., following a heavy thunder-storm, Rocky Fork over flowed its banks and flooded lower portion of city; destructive freshets in the vicinity of Wheeling, W. Va. 31st, the Sacramento valley still remains under water, the depth of water at Sacramento City oscillating between 22 ft. 1 in. and 22 ft. 3 in. throughout the month, the southern suburb below "cross levee" and the village at Washington are still submerged; at Colusa, on the 30th, the water was still near high water mark.

Hail.—1st, Ft. McPherson, Neb.; Baxter Springs, Kan.; De Soto, Neb.; Franklin, Pa. 2nd, Sidney Bks., Neb.; Martinsville, Ill.; Milford, Ind.; Fayetteville, N. C.; Indianapolis, Ind. 3rd, Ft. McHenry, Fallston and New Market, Md.; De Soto, Neb.; Freehold and Pleasant Run, N. J.; Ardenia, N. Y.; Accotink Va.; Carlisle and Philadelphia, Pa. 4th, De Soto, Neb. 6th, Rockford, Ill.; Detroit, Mich.; Burlington, Ia.; Logansport, Ind. 7th, Baxter Springs, Kan.; De Soto, Neb.; Catawissa, Pa.; Boise City, Idaho; New London. 8th, Emerson, Neb.; Beloit, Wis.; Ft. Gibson, I. T.; Fredericksburg and Uvalde, Tex.; Duluth. 9th, Brookhaven, Miss.; Corsicana and Galveston, Tex. 10th, Kensico, N. Y. 11th, Ft. Independence, Mass.; Nora Springs, Ia.; New Bedford and Fall River, Mass.; Kensico, N. Y.; New London. 12th, Cornish, Me.; Keusico, N. Y.; Nashville. 13th, Milford, Ind.; Rowe, Mass.; Woodstock, Vt.; Mt. Solon, Accotink and Fort Whipple, Va.; Bangor and Eastport, Me. 15th, Muscatine, Ia. 16th, Chicago; Detroit. 17th, Reading, Pa. 18th, Ft. Garland, Col.; Creswell, Kan.; Somerset, Mass.; Winnemucca, Nev.; Santa Fe N. M.; New London. 19th, North Volney, N. Y. 20th, Iowa City, Ia.; Genoa, Neb. 23rd, Fort Wayne and Grand Haven, Mich. 24th, Fallston, Md.; Somerset and New Bedford, Mass. 26th, Ft. Wallace, Kan.; Fresno, Cal.; Vevay, Ind.; Independence, Kan.; Detroit. 27th, New Orleans; Vicksburg; Albany; Green Spring, Ala.; Creswell and Independence, Kan.; Brookhaven and Fayette, Miss.; Corsicana and Mason, Tex. 28th, Salt Lake City; Portsmouth, N. C.; De Soto, Neb.; Fayetteville, N. C.; Spartanburg, S. C.; Clarksville and McMinville, Tenn.; Coalville, Utah; Los Angeles, Cal. 29th, Dodge City, Kan. 30th, Camp McDermit, Nev.; Ft. Fred Steele, Wy. Ty.; Fayetteville N. C.; Cincinnati and Lewisburg, Ohio; Brownsville, Pa. 31st, Lewisburg, Ohio; Westchester and Philadelphia, Pa.; Morgantown, W. Va. At Creswell, Kan., on the 1st 2:30 p. m., a furious hail-storm from SW.; 2 inches of hail and 1.58 in. of water fell in 30 minutes.

Depth of Snow at close of Month.—On summit of Mt. Washington, 42 in.; Pike's Peak, 40 in.; Eastport, Me., 15 in.; Elmira, Ill., 1 in.; Rowe, Mass., in woods in vicinity, 6 in.; Dunbarton, N. H., snow drifts in neighboring forests; Urbana, Ohio, 1-10 in.; Catawissa, Pa., 1-10 in.; Woodstock, Vt., half of surface of ground covered.

Rainy Days.—Number of days on which rain or snow has fallen varies as follows: New England, from 8 to 23; Middle Atlantic States, from 6 to 21; South Atlantic States, from 4 to 8; Gulf States, from 4 to 9; Ohio valley, from 7 to 17; Tennessee, 10; Lower Lake region, from 15 to 23; Upper Lake region, from 9 to 18; Upper Mississippi valley, from 10 to 15; Lower Missouri valley, from 7 to 13; Rocky Mountains, 8; Pacific Coast States, from 9 to 15.

Cloudy Days.—For New England the number varies from 8 to 17; Middle Atlantic States, 4 to 13; South Atlantic States, 4 to 10; Gulf States, 2 to 10; Tennessee, 4 to 7; Ohio valley, 6 to 15; Lower Lake region, 12 to 18; Upper Lake region, 10 to 18; Northwest, 4 to 12; Rocky Mountains, 6 to 13; Pacific Coast States, 5 to 18.

RELATIVE HUMIDITY.

The average percentage of relative humidity for the month ranges about as follows: New England, from 62 at Springfield, Mass., to 75 at Wood's Holl and Eastport; Middle Atlantic States, 53 at Lynchburg to 81 at Atlantic City; South Atlantic States, 61 at Augusta to 86 at Cape Hatteras; 67 at Key West; Gulf States, 55 at Shreveport to 75 at Galveston; Ohio valley and Tennessee, 54 at Memphis to 67 at Pittsburgh; Lower Lake region, 66 at Oswego to 82 at Buffalo; Upper Lake region, 68 at Marquette to 83 at Milwaukee; Upper Mississippi valley, 57 at St. Louis to 67 at Keokuk; Red River of the North valley, 74 at Pembina to 76 at Breckenridge; Lower Missouri valley, 62 at Leavenworth to 71 at Bismarck; Western Texas, 41 at Fort Griffin to 44 at Mason; Indian Territory, 56 at Fort Gibson; western portions of Kansas and Nebraska, 54 at Dodge City to 61 at North Platte; Rocky Mountain Stations, 41 at Santa Fe to 59 at Cheyenne; Utah and Nevada, 53 at Salt Lake City to 58 at Winnemucca; Idaho, 62 at Boise City; California, 73 at Los Angeles to 79 at San Diego. The percentage at *high* stations is 65 for Pike's Peak and 86 for Mount Washington.

WINDS.

The prevailing winds at the Signal Service stations are shown by the arrows, flying with the wind, on chart No. II. The *maximum* velocities, in miles per hour, have been given in the description of the movements of low pressure areas.

Total Movements of the Air.—The following are the *largest* monthly movements as recorded at the Signal Service stations, viz.: Pikes Peak, 17,279 miles; Cape May, 13,171; Sandy Hook, 12,335; Thatcher's Island, 12,176; Cape Lookout, 12,039; Dodge City, 11,711; North Platte, 10,892; Sandusky, 10,832; Barnegat, 10,472; Kittyhawk, 10,200; Breckenridge, 10,374; Cheyenne, 10,024; Cape Henry, 9,961; Ft. Whipple, 9,704; Boston, 9,599; Eastport, 9,489; Key West, 9,015. The *smallest* are: Visalia, 1,728 miles; Deadwood, 2,156; Uvalde, 2,627; Bracketville, 3,088; Augusta, 3,155; Boise City, 3,169; Lynchburg, 3,225; Laredo, 3,364; Knoxville, 3,562; Los Angeles, 3,690; Shreveport, 3,944; Springfield, 3,990.

Local storms, tornadoes, &c., have occurred, as follows: On the 2nd, Casey Co., Ky., between 2 and 3 p. m., a severe tornado occurred, doing great damage in vicinity of Rich Hill and Mt. Olive. Its path was about 400 yards wide, and in its course swept away dwellings, large trees, horses, cattle and other stock;